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HISTORY OF THE GRANT SMELTER AND STACK

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In 1878, James B. Grant went to Leadville where in connection with his uncle, James Grant of Leadville, he founded the Grant Smelter. In 1880, Edward Eddy and W.H. James purchased the interest of James Grant of Davenport, Iowa. This smelter burned in May 1882 and was rebuilt near Denver, consolidated with Omaha Smelting Company. It was re-named the Omaha and Grant Smelting Company.

By 1887 it employed four hundred and twenty-five men and had a capacity of 400 tons. There were twenty-three reverbratory roasters and six more being built. This was indeed the largest of its kind in the world.

The smelter in Denver started operation on October 7, 1882 and had a capacity of 300 tons per day. The works covered nearly 50 acres of ground located on the Platte River banks, just north of the city of Denver. The company had a capital of \$3,000,000 by 1895, but the big object of interest of this smelter was its new chimney built in 1892. At the time it was built it was the tallest stack in the United States and had but two rivals in the world. It was 352 feet and 4 inches high and contained a total of 1,943,000 bricks. Its weight above the foundation was 12,376,500 pounds with a pressure on the base of 160 pounds to the square inch. Its diameter at the base was 33 feet and at the top 20 feet. The cost of the erection of the stack is said to have been \$55,000.

The process originally used by Grant to draw off lead was the subject of the first patent case to be tried in Colorado. Messrs. Keyes and Arent had a method of drawing off the lead on which they had a patent which they claimed Grant had used and demanded royalties.

Judge Hallett, the presiding judge, declared that the process was only a modification of an old German furnace which any ordinary mechanic could accomplish and not a product of inventive genius. This decision saved Grant somewhere in the neighborhood of \$18,000.

The method in question, which Grant was using, is as follows: Instead of drawing lead and slag off from the bottom of the furnace through ordinary tap hole, one could draw clean metal through a pipe connecting the bottom of the furnace with an outside basin and that by raising the basin to a height equal to the height of the crucible in the furnace the basin could be kept full, so that the metal could be ladled from it at any time in a clean state. This arrangement was placed at the side of the furnace. They proportioned the size of the slag-eye so that the slag could be drawn off in front of the furnace in a continuous stream. When charges were put in the furnace and smelted, the slags ran off automatically and clean metal rose into the basin without any care on the part of the furnaceman. This method was used in the Hartz mountains of Germany at various times from 1830 to 1860.

To the smelter came trainloads of ore from all parts of Colorado, other mining states, British Columbia and Mexico. From the plant moved other loads of precious metals in smelted form for refineries or the United States mint in Denver.

The industrial area beyond the then northeast limits of Denver with its workers of many nationalities, prominently Slava, came to be known as the melting pot both for ores and people.

The smelters built in the area were founded at a time when the mining industry had hit its rock bottom. Placer mining and hand

machinery had run their course with no methods or equipment for processing ores. A rich empire was dying. Then came the prophets from mining fields abroad and from engineering and metallurgical schools, to construct and develop such life savers as the Grand Smelter.

The peak capacity of the Grant Smelter was 20,000 tons of ore a month and by 1900 had turned out 130 million dollars in gold and silver and was making a big run on copper and zinc.

In 1902 the demand for the smelter was slowing down and in the depression of 1903 it was ^{strike} closed. In 1907 it was finally abandoned and left to the future generations -- the giant stack that Will Rogers described accurately as an overgrown silo.

The original purpose of the stack was forgotten. It stood only as a historical landmark of the Queen City of the Plains, Denver. However, the part it was to play in the future public interest in Denver is perhaps almost as significant as the service it gave the mining industries.

The anecdotes and possible uses of the giant stack poured through the offices of the various Denver mayors for the ensuing 40 years. It was indeed one of the great legendary features of the city of Denver and the state of Colorado. One story goes that one Halloween many years ago some boys-will-be-boys carried the parts of a spring wagon to the top and put it together. Many people thought this was more fascinating than the structure itself.

It has been said by many old timers that there was more gold in the soot on the inside walls of the stack than in all the teeth in Denver. This was proven many times over.

T The distinction of being the first person to scale this stack and view the surrounding community goes to a girl. She was nine year old Stella Willis, still a resident of Denver, who outran a multitude of boys and waved to them from the stack shortly after the last brick was laid.

In 1919 elaborate plans were made to convert the stack into an observation tower, with the city constructing a stairway inside by which sightseers could reach the top. The city bought the property, but principally to get the slag from the smelter for use in paving.

In 1931 two suggestions came to Mayor George D. Begole for possible uses of the stack. One was to make it a memorial to the state's glorious mining history. Another was to transform the stack into a soldiers memorial. The latter plan was to cement the stack white to the top and to build an artistic base in monumental effect. On top of the base, place a figure of a soldier 30 feet tall and train flood lights on it at night. It is said the stack could be seen 50 to 75 miles from Denver

An airplane beacon, a large advertisement for the city of Denver and various other suggestions flowed into the various offices of the city officials until 1936 when Manager of Improvements George E. Cranmer announced plans to convert the giant stack into a municipal incinerator. This was proposed to attempt to eliminate the troublesome and odorous smouldering dumps in various sections of the city. However, the plan did not materialize until December of 1944. Cranmer spent \$500 of public funds to convert the skyscraping smoke stack to its new use. The cavernous opening at the bottom was sealed except for a hole at the top and another at the bottom. Then a dirt ramp

was built to the upper hole. Several trucks rumbled up the ramp and dumped their loads of trash into a maw, then a match was applied. The stack, which once drew smoke through a mile long flue, reduced the trash to ashes in a matter of minutes. In 1945 steel doors were installed in the base of the stack to cut down on the draft. However, the old stack began to crack and show signs of instability and in December 1949, Mayor Quigg Newton ordered the stack demolished. The decision was based on engineers' reports that the towering structure was unsafe and if allowed to stand it would eventually imperil the new municipal stadium being built nearby.

The wave of protests that arose in Denver was enormous. Editorials and news columns brought to light again the glorious mining days of the late 19th century. It reminded the old timers and taught the younger generation about the years when the giant stack poured black smoke into the skies over Denver while the smelter poured tons of glittering metal into the channels of commerce and millions of dollars into the pockets of Denver's silver kings. Interest in the Grant Smelter was as alive as it was in the days it was in operation.

The late Lee Cassey, columnist for the Rocky Mountain News, led the battle of print to promote a contribution fund for the future care of the structure and possibly place a statue of H.A.W. Tabor, one of Colorado's silver kings, on top pointing to the hills whence came his strength and the money he used to develop Denver. One man expressed his anguish at the loss of the stack in the following verse:

O Denver, spare that stack!
Touch not a single brick;
To seal that flouted crack
Would be a simple trick.
Long may it probe the sky

A hallowed spot at last,
A sign of hopes held high --
A tribute to our past.

In spite of all the clamor for rejuvenating the past in the form of the Grant Smelter stack, Mayor Newton's decision stuck and it was decided to raze it on the 25th day of February 1950. Stearns-Roger Company of Denver brought in Omar A. Schultz of Salt Lake City to do the job.

The demolition of the stack was to be accomplished by the use of dynamite properly set to have the entire debris fall close around the base of the stack. The giant destruction fete captured public interest. Over 300,000 spectators, more than the entire population of the state of Colorado at the time the stack was built, were on hand to see the destruction of the structure.

Mayor Newton set off the first of 36 sticks of dynamite, but the salvo didn't shudder the behemoth of the flumes. Three seconds later the second salvo erupted with a dull thud splaying the area at the base of the stack with flying brick and mortar. Eight seconds later the third and mightiest of the blasts boomed out. The stack stood for seventeen more minutes, then suddenly the entire west side of the graceful chimney began slithering to earth.

The great crown of the stack tilted and followed the avalanche of thousands of tons of brick and mortar down the west face of the sentinel. Then from its base mushroomed a giant cloud of white dust which enveloped the spectacle. As the dust screen cleared one could see the east half of the giant still standing.

On each of the two following days the demolition team returned to finally destroy the 70 foot structure that remained after the first

day of blasting.

The Grant Smelter stack died hard, died tough, as did the men who built it, the men who held aloft the memory of yesteryear which it symbolized. It stood up as an emblem of a strong era. It was more than just a historical marker, it was part of the first metallurgical operation in the state of Colorado and through it men contributed to the advancement of the mineral industries.

The great smoke stack told its own story. Like the men who conceived it, like the men who designed it, like the men who built it slowly and painfully for a pityfully small wage, like the men who tended its furnaces, it will live on in history if not in sight.

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